A LISTING OF THE CLAIMS:

Claim 1 (Currently amended): A method for maintaining ~~the~~ integrity of data stored throughout a distributed computer system, the method comprising:

transmitting an object from a server application to a client application;

transmitting an object state from the server application to the client application;

synchronizing the object and object state between the server application and the client application; and

updating the object by invoking a server application method after the step of synchronizing.

Claim 2 (original): The method of claim 1 further comprising the step of:

resynchronizing the object and object state between the server application and the client application after the updating step.

Claim 3 (Currently amended): A method for maintaining ~~the~~ integrity of data stored throughout a distributed computer system, the method comprising:

detecting by a server application a connection outage between a server application and a client application;

storing by the server application all transactions with the client application during the connection outage;

detecting by the client application the connection outage between the server application and the client application;

storing by the client application all transactions with the server application during the connection outage; and

propagating all transactions between the server application and the client application after the connection between the server application and the client application is restored.

Claims 4-11 (previously canceled).

REMARKS

The application has been reviewed in light of the Office Action dated November 24, 2004 and the Advisory Action of April 18, 2005. Claims 1-3 are pending in this application, with claims 1 and 3 being in independent form. Claims 4-11 have been previously canceled. Claims 1 and 3 have been amended by the present Amendment to further clarify the features of the present application.

The Office Action rejected independent Claim 3 under 35 USC § 102(e) as purportedly anticipated by U.S. Patent No. 6,260,158 (Purcell et al.) and Computer Dictionary, 3rd ed., p. 359 (Microsoft Press 1997).

As noted in Applicants' previous response of March 23, 2005, it is well established that anticipation under 35 U.S.C. § 102 requires that each and every element of a claim be disclosed by a single reference.

Here, such a disclosure is neither present in Purcell nor in the Microsoft Press reference. Indeed, the Office Action implicitly acknowledges that Purcell does not disclose all of the elements of the claim. Indeed, the Microsoft press reference is relied upon in the Office Action to compensate for the deficiencies of Purcell. However, such a combination cannot anticipate the present claims under 35 U.S.C. § 102.

Claim 3, as amended herein, relates to a method for maintaining integrity of data stored throughout a distributed computer system. The method comprises a server application detecting a connection outage between a server application and a client application. The server application stores all transactions with the client application during the connection outage. The client application detects the connection outage between the server application and the client application. The client application stores all transactions with the server application during the

connection outage. All transactions between the server application and the client application are propagated after the connection between the server application and the client application is restored.

Purcell et al., as understood by the Applicants, relates to a system and method for maintaining communications within a computer system after data transport failure across a first link. Fail-over capability is attained by re-establishing communications across a secondary link using different transport mechanisms.

The Office Action asserts that Purcell et al. anticipates the Claim 3 by allegedly "disclosing peer processors that each detect a connection outage between them, saving the transactions during the outage, and then propagating the transactions between the systems after the connection between the peers is restored." The Office Action additionally asserts that the peer-to-peer architecture of Purcell et al. is comparable to the client-server architecture of Claim 3, where any one peer is capable of being a server to any other peer acting as a client. The Office Action cites the Microsoft Press Computer Dictionary to draw this comparison.

In asserting "that each [of the peer processors] detect a connection outage between them, saving the transactions during the outage" the Office Action cites Purcell et al., Fig. 2, and Col. 5, line 66 to Col. 6, line 6. Col. 5, line 66 through col. 6, line 6 of Purcell et al. reads as follows:

> If the data send operation fails, e.g., due to disconnection or other primary link failure, the transaction is then posted to the data send service's fail over queue, e.g., DataSendFOQ. In particular, if the pertinent transport 18 signals a loss of connectivity, all pending and new transactions to the particular remote IOP 10 are posted to the aforementioned DataSendFOQ, which is used by the PTS 16 during link re-establishment.

Purcell et al. does not appear to allow for transactions "during the connection outage."

Purcell et al. apparently suspends transactions during a loss of connectivity such that transactions may not occur during the loss of connectivity. For example, Purcell et al. at Col. 6, line 58 to line 65 reads as follows:

> Upon loss of connectivity, a local PTA, e.g., PTS 16B, marks a portion of the memory 22B allocated therein for usage by a remote PTS, e.g., PTA 16A, as "suspended due to transport failure" by setting the access indicator for the corresponding remBufAllocID to "no access". Similarly, the PTA 16B also marks the portion of the memory 22A it allocated on the remote IOP 16A as "suspended due to transport failure".

Therefore, Purcell, even if modified according to the Microsoft Press reference, fails to disclose or suggest claim 3.

The Office Action rejected Claims 1 and 2 under 35 USC 103(a) as purportedly obvious over U.S. Patent No. 5,987,376 (Olson et al.) in view of U.S. Patent No. 6,012,984 (Roseman).

Claim 1 relates to a method for maintaining integrity of data stored throughout a distributed computer system. An object is transmitted from a server application to a client application. An object state is transmitted from the server application to the client application. The object and the object state are synchronized between the server application and the client application. The object is updated by invoking a server application method after the synchronizing.

Olson is directed to multiplayer computer games that communicate over a computer network. Application data relating to the multiplayer computer game (state data) is distributed to each player's computer. Changes to the game state made by one player are communicated to the other players using state updates. In this way, game state may be synchronized among the multiple players.

Roseman relates to a system for providing large arena games, such as bingo, over computer networks. The large arena games may then be played in real time over the computer network.

The Office Action appears to assert that the "game data" of Olson et al. corresponds to the "object" of Claim 1 and the "game state" of Olson et al. corresponds to the "object state" of Claim 1. The Office Action relies on Roseman to draw a connection between "game data" and an "object" and "game state" with an "object state". However, the "game data" and "game state" of Olsen et al., as understood by the Applicants, do not correspond to an "object" and "object state" respectively. The terms "game data" and "game state" of Olson et al. appear to represent the same set of data, and these terms appear to be used interchangeably within Olson et al. For example, Olson et al., Col. 3, lines 14-26, states that data is updated using "state update packets". At Col. 4, lines 14-16, Olson et al. states that, "...changes to application data are synchronized in a manner so as to ensure that each participating client always has a complete and up-to-date state." In addition, Olson et al, Col. 6, lines 11-16 states that, "application data would include, for instance, data that reflects the current state of the game..." Also, Olson et al., Col. 6, lines 30-34 states that "when a client changes its application data, i.e. effects some change to the game state, that change is communicated to the other clients in the application session by way if a state update packet..."

To the extent that transmission and synchronization occurs in Olson et al., only "state update packets" are transmitted. Olson et al. does not appear to utilize complementary data update packets.

Similarly, Roseman does not appear, to the Applicants, to teach or suggest the transmission and synchronization of objects and object states nor does the Office Action

suggest that it does. Therefore the cited art, either individually or taken together, do not teach or suggest independent Claim 1.

In response to these arguments, the Advisory Action states that Applicants are rehashing old arguments. Applicants respectfully disagree.

As noted above, the Office Action appears to assert that the "game data" of Olson et al. corresponds to the "object" of Claim 1 and the "game state" of Olson et al. corresponds to the "object state." As mentioned above, the "game data" and "game state" of Olsen et al., as understood by the Applicants, do not correspond to an "object" and "object state" respectively. In fact, the terms "game data" and "game state" of Olson et al. appear to represent the same set of data, and these terms appear to be used interchangeably within Olson et al. Accordingly, Olson et al. does not teach or suggest "transmitting an object from a server application to a client application" and "transmitting an object state from the server application to the client application" as recited in claim 1 of the present application.

In light of the remarks and amendments made herein, it is respectfully submitted that independent claims 1 and 3, and the claims depending therefrom, are patentable over the cited art for at least the reasons discussed above.

The Advisory Action indicates that the period for reply expires 4 months from the mailing date of the final Office Action, that is, March 24, 2005. A petition for a two month extension of time and the requisite fee for a response within the second month is submitted herewith. Therefore, this Amendment and the concurrently filed Request For Continued Examination are being timely filed.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition, and the Commissioner is authorized to charge the requisite fees to our Deposit Account No. 03-3125.

The Office is hereby authorized to charge any additional fees that may be required in connection with this response and to credit any overpayment to our Deposit Account No. 03-

3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Allowance of this application is respectfully requested.

Respectfully submitted,

RICHARD F. JAWORSKI
Reg. No. 33,515
KEITH J. BARKAUS
Reg. No. 51,431
Attorney for Applicants
Cooper & Dunham LLP
Tel.: (212) 278-0400